

STATE OF WISCONSIN  
DEPARTMENT OF NATURAL RESOURCES

# BUTLER'S GARTERSNAKE STAKEHOLDER NEWSLETTER

FALL 2007

## SITE SELECTION PROCESS - YOUR FEEDBACK WELCOME

### Prioritization and Selection Parameters

In March of 2007, a subset of the February 2007 Population and Habitat Viability Assessment (PHVA) Stakeholder Workshop and Population Viability Analysis (PVA) Workshop participants reconvened to revise the number of sites required to ensure the long-term conservation of the Butler's gartersnake. As described in the March 2007 Newsletter, the conservation target was revised to 40 Tier 3 sites, and a greater emphasis was placed on sites with linking (metapopulation) potential and those with genetic and/or geographic uniqueness. These factors as well as the biological and socioeconomic prioritization schemes developed at the PHVA workshop were designed to select and prioritize the sites in order of conservation priority. Since March, the Department has quantified the biological and socioeconomic parameters, which were then used to prioritize the Tier 3 sites. What is presented in this newsletter is the first application of our site selection process. Please note that we are presenting these initial results to elicit stakeholder response and feedback on our methods.

The prioritization and ranking factors and weights used in this preliminary effort to rank the sites are based on the system developed at the workshops and are presented in Table 1. Please refer to the Stakeholder Report for more details on the rationale and formula for calculating each parameter. Please note that metapopulation potential was modified at the March 22<sup>nd</sup> workshop from being a ranking parameter to being a selection criterion. The socioeconomic parameter *economic value* was by far the most difficult parameter to quantify.

At the workshop it was suggested that we use estimated market value of the parcels, as this information is easier

Table 1. Biological and Socioeconomic Ranking Parameters and Weights

% of Score	Ranking Parameter	Category (point value)				
7%	Proportion of Parcel to Site (%)	<29% (10)	29-37% (7)	37-44% (4)	>44% (1)	
7%	Proportion of BGS Habitat:Site (%)	<16% (10)	16-23% (7)	23-33% (4)	>33% (1)	
13%	Parcel Ownership	Public (10)	Mostly Public (7)	50:50 Mix (5)	Mostly Private (3)	Private (1)
7%	Average Parcel Size (acres)	>26 (8)	17-26 (6)	10-17 (4)	<10 (2)	
17%	Upland Quality	Good (10)	Moderate (5)	Poor (1)		
17%	Wetland Quality	Good (10)	Moderate (5)	Poor (1)		
8%	Suitable Wetland Perimeter (feet)	>75K (10)	25-75K (8)	15-25K (6)	10-15K (4)	<10K (2)
8%	Restorable Upland Habitat (acres)	>20 (10)	12-20 (8)	6-12 (6)	3-6 (4)	<3 (2)
8%	Total Area (acres)	>300 (10)	100-300 (8)	70-100 (6)	40-70 (4)	20-40 (2)
8%	Upland Area (%)	>30% (10)	15-30% (5)	<15% (1)		

to obtain than appraisals and is more accurate than assessments. WDNR-Real Estate staff suggested also looking at recent land sales to get an average value for each municipality within the Butler's gartersnake range. However, assessed, equalized-assessed, and estimated market values are problematic for parcels that are publicly owned, in agriculture, or in manufacturing. In lieu of having accurate market estimates and conducting assessments, the average size of parcels was used as a surrogate to market value, since there is a well-documented relationship between parcel size and market value. The State's reported Vacant Land Sale Acreage breakdowns were used to create the categories for this parameter.

### **Current Iteration of the Site Prioritization and Selection Process**

This edition of the newsletter presents the first application of the biological and socioeconomic prioritization schemes. Each site received a composite score that is weighted two-thirds biological and one-third socioeconomic (see Table 1, page 1) and was evaluated against the following criteria:

- Geographically unique or representative (most centric or highest ranked site in a grouping of sites where none otherwise meets any of the selection criteria);
- Unique genetic characteristics (per Dr. Gordon Burghardt's analysis);
- Compatible site use (e.g., natural area);
- Moderate to high metapopulation potential.

### **Draft Results**

By selecting the top 40 ranked sites as well as those that met one or more of the criteria listed above, we produced a list of 76 Tier 3 sites out of a total of 172. Remarkably, 44 of the selected sites have confirmed Butler's gartersnake presence. This number is subject to change, though, as nine of these sites are in the indeterminate zone and may be found to harbor Butler's-plains gartersnake hybrids as spring/fall genetics samples are analyzed.

Other interesting results of the process include a breakdown of land use types within a Butler's gartersnake site. Using land use data from the Southeastern Wisconsin Regional

**Table 2. Land Use on Butler's Gartersnake Tier 3 Sites**

SEWRPC Land Use Data	% of Land Area
Residential	0.86%
Commercial	0.05%
Industrial	0.34%
Transportation	1.71%
Utility	0.36%
Government	0.05%
Outdoor Recreation	1.12%
Agriculture	23.71%
Wetland	58.41%
Unused	11.53%
Landfill	0.29%
Woodlands	0.76%
Water	0.82%

Planning Commission (SEWRPC), Table 2 shows that the vast majority of the 172 Butler's gartersnake Tier 3 sites are on wetlands or agricultural land.

The Department welcomes your feedback as we continue to hone this selection process, given that targeting sites for conservation serves as the backbone of the Butler's gartersnake Conservation Strategy.

## **PROGRAM STAFF UPDATES**

Derek Strohl began his work in September as the Southeast Region's Butler's Gartersnake Conservation Biologist. Derek has worked with many stakeholders as a consulting ecologist and as the former program director at the Wisconsin Wetlands Association, and he has managed habitats with the Ozaukee Washington Land Trust.

Derek will be streamlining the regulatory process associated with this species and working proactively with landowners to protect and manage Butler's gartersnake habitats.

Rori Paloski, previously a Conservation Biologist with the Bureau of Endangered Resources, is now the Bureau's Incidental Take Coordina-

tor, a position previously held by Andy Galvin. Rori spent the previous 3½ years working on various aspects of the Butler's gartersnake project, from coordinating fieldwork and managing project databases to coordinating environmental reviews for the species.

### **For More Information Contact:**

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